

LETTER AGREEMENT
HIGH PRESSURE COLLABORATIVE ACCESS TEAM
(HPCAT) AGREEMENT

Section I: Purpose

The purpose of this agreement is to describe the terms governing the High Pressure Collaborative Access Team (HPCAT), which manages the Sector 16 facility at the Advanced Photon Source (APS) of Argonne National Laboratory (ANL).

Section II: Partners

HPCAT is sponsored by the National Nuclear Security Administration (NNSA) and the Basic Energy Sciences (BES) Program in the Office of Science of the Department of Energy (DOE), and managed by the Carnegie Institution of Washington (CIW). Institutional partners include the managing partner and other partners (see Appendix I). The managing partner shall manage the HPCAT's budget and finances, human resources, personnel actions (hires, salary, promotions), contracts and purchasing, and property management. Other institutional partners may be added to this agreement or may substitute for current partners after consultation with the managing partner and mutual agreement with other partners.

Section III: Executive Council

The Executive Council (EC) shall serve as the primary governing body of HPCAT. The EC will be composed of designated representatives of HPCAT stakeholders listed in Appendix II. EC's authority will include approval of personnel actions (joint positions with partners, permanent hires, promotions) and non-personnel expenditures exceeding \$50K. In addition, the EC will recommend membership of the Advisory Committee.

Section IV: Roles and Responsibilities of the Directors

The managing partner will appoint an Executive Director of the Council, presiding over the EC. The Executive Director shall represent the managing partner, chair the EC meetings, and represent the EC in signing memoranda of understanding (MOUs).

The managing partner will nominate and, with approval of other partners, will appoint a Director of HPCAT. The HPCAT Director shall:

- (1) Consult with the Executive Director on partnership, personnel, and budgetary issues.
- (2) Propose the budget required to reach the goals and make efforts to raise appropriate funds for HPCAT operation and development.
- (3) Manage the daily operations and safety of HPCAT.

- (4) Prepare HPCAT near- and long-term goals, which are consistent with the HPCAT mission and have the consensus support of the EC.
- (5) Provide status and progress reports to the funding sponsors.
- (6) Coordinate the operational activities and strategic matters with the EC and the Advisory Committee.

Section V: Meeting and Quorum

- A. The EC shall meet as needed, but at least annually.
- B. EC meetings shall be called by the Executive Director with a written notice provided to all EC members at least ten days in advance of the EC meetings.
- C. Given a written request by 60% of the EC, within ten days of receipt of such request, the Executive Director shall announce a special meeting of the EC to be held within thirty days.
- D. A quorum of the EC exists when there are more than 50% votes of the EC in attendance. Attendance includes those physically present or connected from remote locations.

Section VI: Voting

- A. In general, consensus decisions on HPCAT management and operation will be sought within the EC. In the event that a consensus cannot be achieved, a 2/3 majority of total voting shares will determine whether to accept or reject a proposed action. For voting outcomes between 1/2 and 2/3 of total voting shares, the Executive Director will make the final decision.
- B. Voting shares will be determined according to the participation percentages listed in Appendix III.
- C. This voting system may be amended as needed with concurrence of funding sponsors.

Section VII: Advisory Committee

- A. The Advisory Committee (AC) shall review strategic directions to maintain HPCAT as a forefront facility serving scientific interests of the partners and missions of the funding sponsors. The AC will assess the scientific productivity of HPCAT, provide strategic advice and guidance on optimizing scientific impact and new research thrust areas, and evaluate development plans and offer feedback regarding feasibility of new capabilities and enhancements of existing capabilities. The AC will review scientific, technical, and management matters, and report to the Executive Director who will communicate the findings to the EC.
- B. The AC shall consist of six to twelve members recommended by the EC, including the HPCAT Director and experts in the field of high pressure and synchrotron research outside the partners' organizations (Appendix IV). AC Members will be appointed for three year terms with the possibility of renewal.

- C. The AC shall meet as needed, but at least annually. Meetings of the AC shall be called by the HPCAT Director with written notice provided to all AC members at least ten days in advance of the meeting. A simple majority of the AC shall constitute a quorum of the AC.
- D. If a special AC meeting is required, the HPCAT Director shall announce a special meeting to be held within 30 days.
- E. Each member of the AC shall have an equal vote. All recommendations of the AC shall be by a majority of those voting at a meeting at which a quorum is present. Alternative recommendations may also be provided.
- F. Any AC member may recommend to the HPCAT Director an alternate member who has the authority to substitute for, and vote in place of, that member as representative(s) on the AC in all matters.

Section VIII: Beam Time Allocation

- A. Beam time shall be allocated according to a system that meets the following guidelines. Beam time scheduling shall be managed by the HPCAT Director.
 - 1. Only high quality proposals will be eligible for allocations of beam time.
 - 2. 25% of the beam time shall be reserved for general users, as required by APS.
 - 3. Up to 8% may be allocated for beam line maintenance and machine study.
 - 4. Up to 7% may be allocated for beam line development projects.
 - 5. Up to 10% may be allocated for specific technical developments or for scientific projects proposed by HPCAT Director or partners, with concurrence of the EC.
 - 6. All remaining beam time, with a minimum of 50%, shall be distributed among the partners, in proportion to their interests specified by the funding sponsors (Appendix III).
- B. It shall be the duty of the HPCAT Director to resolve in a collegial spirit any conflicts among partners or other users about the availability of beam time.
- C. The schedule shall be accessible at all reasonable times to all partners. If a partner, however, schedules beam time and does not use it or does not cancel it within constraints to be recommended by the HPCAT Director, then that beam time counts as if it were actually used by the partner. Each partner shall be responsible for resolving differences among its own staff concerning allocation of that partner's beam time.

Section IX: Amendment

- A. Amendment of this agreement requires a unanimous vote of the EC provided that the proposed amendment has been officially sent to each member of the EC and the Executive Director at least forty-five days prior to the meeting at which it is to be voted upon.
- B. An amendment may be proposed by any member of the EC.

Section X: Hold Harmless

Each party agrees to hold the other parties harmless from all liability for injury to or death of persons or other living things, or injury to or destruction of property, arising from that party's intentional or negligent acts or omissions in the performance of the services, materials supplied, or information supplied under the Agreement.

IN WITNESS WHEREOF the parties, through their authorized representatives, have executed this Agreement on the date shown opposite their signature.

Carnegie Institution of Washington

_____ DATE _____
By:
Its: President

Department of Energy, National Nuclear Security Administration

_____ DATE _____
By:
Its: Program Director

Department of Energy, Office of Science

_____ DATE _____
By:
Its: Program Director

Appendix I: Designated representatives of HPCAT stakeholders (June 2016)

Managing partner - Carnegie Institution of Washington

- Executive Director
- HPCAT Director

DOE-NNSA partners

- Carnegie DOE Alliance Center (CDAC)
- University of Nevada at Las Vegas (HiPSEC- UNLV)
- NNSA Tri-Labs
 - Lawrence Livermore National Lab (LLNL)
 - Los Alamos National Lab (LANL)
 - Sandia National Lab (SNL)

DOE-BES partner(s)

- Carnegie Institution of Washington (CIW)

Appendix II: Executive Council (June 2016)

Managing partner - Carnegie Institution of Washington

- Executive Director (V. Struzhkin)
- HPCAT Director (G. Shen/S. Sinogeikin)

DOE-NNSA (S. Brown, K. LeChien, R. Schneider)

- CDAC (R. Hemley/S. Gramsch)
- HiPSEC-UNLV (A. Cornelius)
- NNSA Tri-Lab
 - LLNL (W. Evans/H. Cynn)
 - LANL (N. Velisavljevic)
 - SNL (C. Seagle)

DOE-BES (L. Wilson)

- CIW (G. Shen/H.K. Mao/ V. Struzhkin)

Non-voting members

- X-ray coordinator of EFRee (M. Baldini, tbd)
- Dynamic Compression Sector (DCS, P. Rigg, tbd)

Appendix III: Voting shares (June 2016)

- 25%, DOE-BES (represented by CIW)
- 75%, DOE-NNSA (represented by 30% CDAC, 20% HiPSEC, 25% Tri-Lab)

Appendix IV: Members of the Advisory Committee (June 2016)

- M. Desjarlais (SNL), 2013 - current
- T. Duffy (Princeton U), 2015 - current
- C.C. Kao (Stanford), 2006 - current
- M. Kunz (Berkeley), 2006 – current
- C. Mailhot (SNL), 2016 - current
- M. Rivers (U Chicago), 2006 - current
- G. Shen (HPCAT Director)
- D. Shu (ANL), 2006 - current
- W. Sturhahn (Caltech, Chair), 2006 - current
- C.S.. Yoo (Washington State), 2013 - current